

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

2001 NCFMP Lidar: Phase 1A (Neuse, Pasquotank, Tar-Pamlico, White Oak River Basins)

**1.2. Summary description of the data:**

This airborne LiDAR terrain mapping data was acquired January through March 2001. The data were collected for the floodplain

mapping program for the state of North Carolina. The data were collected for the state in three phases: 1, 2, and 3.

This metadata record describes that data that were in phase 1 of collection and fall within the Neuse, Pasquotank, Tar-Pamlico,

and White Oak River Basins in central and eastern North Carolina. This area consists of 33 counties which are listed below in

the Place Keywords field.

The data were received by the NOAA Office for Coastal Management from the U.S. Geological Survey (USGS) Center for Lidar

Coordination and Knowledge (CLICK). For data storage and Digital Coast provisioning purposes, the OCM converted the data

to geographic coordinates and ellipsoid (Geoid99) elevations. The data are unclassified.

Original contact information:

Contact Org: NC Floodplain Mapping Program

Phone: 919-715-0408

Email: hmorgan@ncem.org

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2001-01-03 to 2001-03-23

**1.5. Actual or planned geographic coverage of the data:**

W: -79.241832, E: -75.451653, N: 36.563854, S: 34.464308

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?****4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):****5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

**Process Steps:**

- 2001-02-01 00:00:00 - All data collection flights were initialized and finalized during periods of GPS Position Dilution of Precision greater than 4. GPS data quality was evaluated post-flight to ensure sufficient quality for LIDAR data requirements and integration. GPS base maximum allowable distance between stations was established such that no more than a 50 mile radius occurred between occupations. Swath width of terrain covered in a single flightline for inland areas at an altitude of 12,000 feet AMT was approximately 3,411 meters, coastal areas at an altitude of 8,000 feet AMT was approximately 2,274 meters. Field of View for the Leica GeoSystems Aeroscan system used was 50 degrees project wide, or 25 degrees from nadir with a maximum of 5 returns collected for each pulse. Ground distance between flightlines for inland areas at 12,000 feet AMT was approximately 2,388 meters, for coastal areas at 8,000 feet AMT was approximately 1,592 meters. Nominal post spacing for finalized Bare Earth product was 3 meters. An average of 10-20 rapid static GPS survey collected ground control points were established per base airport project wide to detect and correct horizontal and vertical bias. Typically, 3 or more flightlines of LIDAR returns were collected for each airport lift, one of which being bi-directional for use in optimizing instrument boresight angles to account for aircraft pitch, yaw and roll. All post process collection quality assurance is achieved aided by airport cross and bi-directional flightlines, entire lift cross flightlines, and the use of surveyed ground control points.
- 2001-02-01 00:00:00 - Checking for coverage and anomalies, Airport calibration, Production flightline calibration, and Removal of blunders
- Tiling Automated filtering for point classification, Manual editing to classify points, Quality control, Removal of all points not classified as bare earth
- The methods used to develop these data for the North Carolina Floodplain Mapping Program are documented in LIDAR Bare Earth Mass Points and Breaklines Technical Document, available online at [www.ncfloodmaps.com](http://www.ncfloodmaps.com).
- 2012-12-01 00:00:00 - The lidar point data were received by the NOAA Office for Coastal Management from the USGS Center for Lidar Coordination and Knowledge (CLICK) in las format. The files contained lidar elevation and intensity

measurements. The data were unclassified, in State Plane coordinates, and were vertically referenced to NAVD88. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from State Plane coordinates to geographic coordinates. 2. The data were converted from orthometric (NAVD88) heights to ellipsoidal heights using Geoid99. 3. The data were sorted by time and laszipped.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## **6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/49830>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

NOAA Office for Coastal Management (NOAA/OCM)

**7.2.1. If data hosting service is needed, please indicate:****7.2.2. URL of data access service, if known:**

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=1397>  
[https://coast.noaa.gov/htdata/lidar1\\_z/geoid18/data/1397](https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/1397)

**7.3. Data access methods or services offered:**

This data can be obtained on-line at the following URL:

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=1397>

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**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

## **8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

### **8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

#### **8.1.1. If World Data Center or Other, specify:**

#### **8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

### **8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office for Coastal Management - Charleston, SC

### **8.3. Approximate delay between data collection and submission to an archive facility:**

### **8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

## **9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*